

**Notice of Allowability**

Application No.

10/531,051

Examiner

Charles Chow

Applicant(s)

MIURA ET AL.

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/4/2007.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                              |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

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### Detailed Action

1. This office action is for amendment filed on 6/4/2007.

### Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance:

Claims 1-20 are allowable over the prior art of record. The prior arts fail to teach the allowable features, singly, particularly, or in combination or rendering obviousness, with the effective filing date of 12/2/2002.

Applicant has amended independent claims 1-2, with allowable features, & claims 3-5 are indicated to be allowable in the last office action.

The newly added independent **claims 18-20** are allowable due to their structural functions for the features n below, for:

a transmitted electric power detecting part, an error calculating part; a transmitted electric power deciding part; a switch part for selecting and outputting any one of the calculated error and a gain control correction value; an error deciding part; and integrating part for integrating the outputted correction value; an adding part for adding the set transmitted electric power to the gain control correction; an electric power value/gain control.

The cited prior arts fail to teach the features in independent **claim 1**, for the **receiving of the power control bit** associated with **the smoothly changing the gain** in below:

a transmitted electric power setting part for receiving a transmitted electric power control bit sent from other station, said setting part utilizing said bit for setting a set transmitted electric power;

a buffer unit for receiving said error and said transmitted electric power setting value and for outputting a correction signal used for correcting the gain of the variable gain amplifier for

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smoothly changing the gain when the set transmitted electric power is set to put the transmitted electric power over a threshold value,

The prior arts fail to teach the features in independent **claim 2**, for the a transmitted electric power setting part for receiving a transmitted electric power control bit sent from other station, said setting part utilizing said bit for setting a set transmitted electric power; together with the structure of the functional blocks in below, for:

an electric power value/gain control; a transmitted electric power detecting part; an error calculating part; a transmitted electric power deciding part; an error integrating part; an adding part.

The prior arts fail to teach the features in independent **claims 3-5**, for the structural functions, for

transmitted electric power detecting part; **an error deciding part** for deciding whether or not an input signal **from the switch part** is located within a tolerance to output a correction value corresponding to the decided result, **together with the features for**

**an integrating part for integrating the outputted correction value** and outputting an integrated result as the gain control correction value;

**an adding part for adding the set transmitted electric power to the gain control correction value**; and

**an electric power value/gain control signal converting part for converting the added result to a gain control signal of a form for controlling the gain** of the variable gain amplifier and outputting the gain control signal to the variable gain amplifier.

The dependent claims 6-15/3-5, 16-17/5 are also allowable due to their dependency upon the allowable independent claims above and the having additional claimed features.

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The closest prior art, **Weiland [ US 5,590,408 ]** teaches the closed loop transmitting power control with command from cell site [Fig. 4, col. 5, lines 15-34] for limiting the saturation [401, Fig. 4/ Fig. 2], the power error deciding in 206, 209, the adder 210 for the gain control to amplifier 202, & a switch/Mux 302 which is located after adder 210, but fails to teach the receiving of the power control bit sent from other station associated with the smoothly changing the gain when the set transmitted electric power is set to put the transmitted electric power over a threshold value; the error integrating part.

**Sahota [ US 6,819,938 ]** teaches the integrator 144 in 120 for integrating the output of adder 118 for the gain controlling of the transmitting amplifier 122, 124 [Fig. 6, Fig. 4], but fails to teach the integrating of the correction value, then, adding the correction value to the set transmitted power.

Other prior arts in below has been considered, but they fail to teach the above allowable features.

**Mucke et al. [ US 5,548,616 ]** teaches the transmitting power level control [ Fig. 1, Fig. 5, Fig. 7, Fig. 9], having adder 42 for Tx open loop power 38 & Tx closed loop 40, limiter 43, slope corrector 36 for the Tx gain setting, but fails to teach the above allowable features.

**Mollenkopf et al. [ US 6,377,786 ]** teaches the gain control of transmitting power, having the transmit power tracking loop 216 [Fig. 2-3, abstract], but fails to teach the above allowable features.

**Takano et al. [ US 2006/0189,285 A1 ]** teaches the transmitting gain control in 100 for the AM & PM, modulations [Fig. 1 & its description in specification], having switch SW1-2, gain controller 160 for variable amplifier IVGA, IMVGA in the control loop, but fails to teach the above allowable features.

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Other prior arts are also considered. They are: Ezuka [ US 2003/0231,058 A1], Wenzel et al. [ US 7,031,677 B2], Jensen [ US 5,159,283], Lunch et al. [ US 6,718,180 B1], Miyake [ US 5,732,334], Saruwatari et al. [ US 7,155,251 B2], Son et al. [ US 7,167,045 B1], Kurby et al. [ US 6,252,455 B1].,

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles C. Chow whose telephone number is (571) 272-7889. The examiner can normally be reached on 8:00am-5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles Chow *cc*,

July 3, 2007.

  
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